

Improving Livelihood through an Upgrade of Artisanal Small-Scale Mining Practices

Olushola Eniowo and Bertie Meyer

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Abstract

If we trace our cultural roots as Africans, we will realise that two major occupations have played big roles as primary sources of livelihood, particularly for rural community dwellers – subsistence agriculture and small-scale mining. In this paper, we will focus on the latter: its relevance, challenges, and the way forward.

Keywords

Artisanal Small-Scale Mining (ASM), livelihood, upgrade, Africa

Introduction

Mining activities play a big role in our daily lives, from its contribution as the primary source of raw materials for construction of roads, hospitals, and homes, to its usefulness in providing components for computers, mobile devices, and other technological gadgets in use today. Artisanal Small-Scale mining (ASM), a mining sub-sector, promotes the development of rural communities, and reduces rural-urban migration. While there are various definitions in the literature, ASM can simply be described as a rudimentary form of mining practiced by individuals, families, or groups, with minimal mechanisation, often in the informal sector of the market (Hentschel, Hruschka and Priester 2003). This article exposes the relevance of ASM as a source of livelihood and identifies its lingering challenges. It then discusses measures through which the potential of this mining subsector could be enhanced.

ASM has deep roots in African culture, and it has been practiced for centuries across the African continent. For example, the people from the Ashanti tribe in Ghana have been practicing ASM as far back as the pre-colonial era, and they view this occupation as their cultural heritage. Similarly, the ASM extraction of tin ore in the Jos-Plateau, Northern Nigeria, dating back to the nineteenth century is well documented in the literature (Mallo 2011). Despite the long history of this occupation and its widespread proliferation across the continent, ASM continues to exist on the periphery of the formal economy. This is quite worrisome considering the innumerable potentials of the profession.

While government agencies have labelled the environmental degradation traced to ASM as a stumbling block to development, the role of the occupation as a primary means of livelihood for rural dwellers, as well as its overall contribution to mineral production, cannot simply be overlooked. Hence, it is argued that the way forward must be a path towards formalising the occupation by including the operators in the formal domain, to curtail the excesses of this mining sub-sector and enhance its potentials as a primary means of livelihood for rural dwellers.

Relevance of ASM

ASM plays a big role in reducing poverty in rural communities. Unemployed youth, who otherwise could have been restive and take to social vices, oftentimes find easy alternative means of livelihood in ASM, especially since only simple and affordable tools are required to start the business. A typical example of this scenario was the situation in Mali where residents rushed to ASM for succour after the central government withdrew support following the coup d'état in 2012. Teschner (2014) reports that during this period in Mali, local technological capability improved in the sector, increased local investment, and

profitability soon followed. This provides a glimpse of the prospect of the industry in Africa, if well harnessed. Furthermore, ASM makes immense contributions to mineral production and the economy. Hilson (2001) asserts that a significant contribution to mining revenue in Ghana is made by the ASM sector whose operations are mostly classified as illegal. For example, it is estimated that about 300,000 – 500,000 artisanal miners in Ghana who work without official licenses, contributed about \$461.1 million to Ghana's economy since 1989 (Boadi et al. 2016). Similarly, the Governor of the Reserve Bank of Zimbabwe reported that in July 2017, large mining companies produced a total of 930kg of gold while artisanal miners produced 1.2t of gold (Zvarivadza 2018). Even though the production capacity of each ASM outlet is usually minimal, considering the large units of ASM operations in each country, their overall national production is often significant.

Governments across the continent have also identified the unlocked potential in ASM. In South Africa, ASM is perceived as a vehicle for social and economic development, particularly for disadvantaged communities that were excluded from participating in the national mining economy before 1994 (Olawuyi 2019). While up to 90 per cent of mining companies in the country are large-scale, mostly owned by transnational mining conglomerates, ASM activities are seen as an avenue for locals to have direct access to the mining industry and benefit from the country's mineral wealth (Ledwaba and Nhlengetwa 2016).

Over the past few decades, efforts have been made to promote inclusive development in developing nations and one key sector that has been identified to have a big potential in this direction, particularly for rural inhabitants, is the ASM sector. This sub-sector has been recognised in South Africa, and strides have been made towards this direction. One notable policy direction is the enactment of the Mineral and Petroleum Resources Development Act (MPRDA) of 2002, whose main objective is to ensure broad-based economic empowerment and participation of historically disadvantaged persons in the mining industry (Ntsaluba 2018).

Challenges affecting ASM

ASM is commonly known for its associated safety, health, and environment challenges. The use of cheap and affordable processing techniques by the miners results in contamination of land and water bodies, which in turn leads to vast environmental pollution and health hazards. This equally has consequences on other traditional means of livelihood such as agriculture. When water bodies are polluted, fish begin to die, which places the fishing industry at risk. Similarly, the contamination of the soil negatively affects the yielding of crops, limiting crop production. This led Ofosu et al. (2020) to question the compatibility of ASM with agriculture.

Consequently, many stakeholders argue that ASM as an occupation should be discouraged to pave way for a more organised and sustainable large scale mining sector. However, some scholars posit that salvaging the occupation, by upgrading the techniques being used, should be considered, rather than discouraging the practice of the profession in its entirety (Eniowo and Meyer 2020). This argument is premised on a juxtaposition of the cons of the occupation, viz-a-viz its innumerable potentials. In this vein, upgrading ASM to a more sustainable form of small-scale mining practice is prescribed.

While the challenges to ASM upgrade are broad, they are equally interlinked. One fundamental constraint that links other challenges to ASM upgrade is the lack of access to credit facilities (Reichel 2019). Most ASM operators would like to semi-mechanise to upgrade production capacities or develop new reserves. However, the reality is, access to credit and formal banking is difficult for ASM miners, and they face critical problems dealing with formal financing (Hentschel, Hruschka and Priester 2003).

Conclusion and the way forward

As we celebrate Heritage month this month, we must prioritise the need to protect the environment. Safer mining practices must be encouraged at all levels, and the best place to start is at the community level where ASM hold sway.

Again, if the goal of upgrading ASM is to achieve inclusive development, then the occupation must be viewed beyond the lens of 'poverty eradication'. Rather, attention must be placed towards upgrading the occupation to a more sustainable form of mining that embraces global best mining practices.

Conclusively, if this goal of upgrading ASM activities is to be achieved, then the operations must be formalised through a conscious effort to integrate ASM operators into the formal domain. This formalisation effort should be tailored with a sustainable finance mechanism that aids optimum productivity and sustainable mining practice.

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